

CLAIMS

What is claimed is:

1. In a server computer system that provides Web pages to requesting client computer systems, the Web pages potentially including content from locations that are external to the server computer system, the server computer system including a cache that stores portions of cached content previously received from locations external the server computer system, a method for causing a cache entry to be dependent on a customized dependency, the method comprising the following:

an act of accessing an extensible cache dependency base class;

an act of deriving a customized cache dependency class from the extensible cache dependency base class, the customized cached dependency class for implementing the customized dependency;

an act of accessing a portion of content that is to be delivered to a client computer system;

an act of creating a cache entry that associates the customized dependency with the accessed portion of content; and

an act of inserting the cache entry into cache such that the validity of the cache entry is dependent on the customized dependency.

2. The method set forth in claim 1 wherein the act of accessing an extensible cache dependency base class comprises an act of accessing a cache dependency base class that includes a notify dependency changed method such that classes derived from the cache dependency base class can implement purging functionality of the cache dependency base class by calling the notify dependency

changed method.

3. The method set forth in claim 1, wherein the act of accessing an extensible cache dependency base class comprises an act of accessing a cache dependency base class that includes a dependency dispose method such that classes derived from the cache dependency base class can release resources occupied by a cache entry by calling the dependency dispose method.

4. The method set forth in claim 1, wherein the act of deriving a customized cache dependency class from the extensible cache dependency base class comprises an act of deriving customized cache dependency class that can be implemented to cause a cache entry to be dependent on a database table.

5. The method set forth in claim 1, wherein the act of deriving a customized cache dependency class from the extensible cache dependency base class comprises an act of deriving customized cache dependency class that can be implemented to cause a cache entry to be dependent on a Web service.

6. The method as recited in claim 1, wherein the act of accessing a portion of content that is to be delivered to a client computer system comprises an act of accessing a portion of content that is to be included in a Web page.

7. The method as recited in claim 1, wherein the act of accessing a portion of content that is to be delivered to a client computer system comprises an act of accessing a portion of content from a database table.

8. The method as recited in claim 1, wherein the act of accessing a portion of content that is to be delivered to a client computer system comprises an act of accessing a portion of content from a Web service.

9. The method as recited in claim 1, wherein the act of creating a cache entry that associates the customized dependency with the accessed portion of content comprises an act of creating a cached that causes content from a database table to be dependent on the database table.

10. The method as recited in claim 1, wherein the act of creating a cache entry that associates the customized dependency with the accessed portion of content comprises an act of creating a cached that causes content from a database table to be dependent on an aggregate dependency.

11. The method as recited in claim 1, wherein the act of creating a cache entry that associates the customized dependency with the accessed portion of content comprises an act of creating a cached that causes content from a Web service to be dependent on the Web service.

12. The method as recited in claim 1, wherein the act of inserting the cache

entry into cache such that the validity of the cache entry is dependent on the customized dependency comprises an act of inserting a cache entry that is dependent on a database table.

13. The method as recited in claim 1, wherein the act of inserting the cache entry into cache such that the validity of the cache entry is dependent on the customized dependency comprises an act of inserting a cache entry that is dependent on an aggregate dependency.

14. The method set forth in claim 1, wherein a start time property does not need to be specified to invoke the functionality of the extensible cache dependency base class.

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15. In a server computer system that provides Web pages to requesting client computer systems, the Web pages potentially including content from locations that are external to the server computer system, the server computer system including a cache that stores portions of cached content previously received from locations external the server computer system, a method for purging a cache entry, the method comprising the following:

an act of monitoring one or more custom dependency conditions associated with an instance of a customized cache dependency;

an act of determining if the one or more custom dependency conditions have been be satisfied;

an act of receiving an indication that the one or more custom dependency conditions have been satisfied; and

an act of purging a cache entry at the server computer system in response to receiving the indication.

16. The method as recited in claim 15, wherein the act of monitoring one or more custom dependency conditions associated with an instance of a customized cache dependency comprises an act of monitoring a database table dependency.

17. The method as recited in claim 15, wherein the act of monitoring one or more custom dependency conditions associated with an instance of a customized cache dependency comprises an act of monitoring a Web services dependency.

18. The method as recited in claim 15, wherein the act of monitoring one or more custom dependency conditions associated with an instance of a customized cache dependency comprises an act of monitoring an aggregate dependency.

19. The method as recited in claim 15, wherein an act of determining if the or more custom dependency conditions have been be satisfied comprises an act of determining in a flag entry has been incremented.

20. The method as recited in claim 15, wherein an act of determining if the or more custom dependency conditions have been be satisfied comprises an act of determining if a dependency condition associated with an aggregate dependency has been satisfied.

21. The method as recited in claim 15, wherein an act of determining if the one or more custom dependency conditions have been be satisfied comprises calling a notify dependency changed method upon the happening of some event specified by an instance of a customized cache dependency class.

22. The method as recited in claim 15, wherein an act of receiving an indication that the one or more custom dependency conditions have been satisfied comprises an act of receiving an indication from a notify dependency changed method that the one or more custom dependency conditions have been satisfied.

23. The method as recited in claim 15, wherein the act of purging a cache entry at the server computer system in response to receiving the indication comprises an act of purging a cache entry that was dependent on a database table.

24. The method as recited in claim 15, wherein the act of purging a cache entry at the server computer system in response to receiving the indication comprises an act of purging a cache entry that was dependent on a Web service.

23. The method as recited in claim 15, wherein the act of purging a cache entry at the server computer system in response to receiving the indication comprises an act of purging a cache entry that was dependent on an aggregate dependency.

24. The method as recited in claim 15, further comprising:
an act of releasing resources that were consumed to maintain the purged
cached entry.

25. The method as recited in claim 24, wherein the act of releasing resources that were consumed to maintain the purged cached entry comprises an act of calling a DependencyDispose method associated with customized cache dependency, the customized cache dependency being derived from an extensible cache dependency base class.

26. A computer program product for use in a server computer system that provides Web pages to requesting client computer systems, the Web pages potentially including content from locations that are external to the server computer system, the server computer system including a cache that stores portions of cached content previously received from locations external the server computer system, the computer program product for implanting a method for causing a cache entry to be dependent on a customized dependency, the computer program product comprising one or more computer-readable media having stored thereon computer executable instructions that, when executed by a processor, cause the server computer system to perform the following:

access an extensible cache dependency base class;

derive a customized cache dependency class from the extensible cache dependency base class, the customized cached dependency class for implementing the customized dependency;

access a portion of content that is to be delivered to a client computer system;

create a cache entry that associates the customized dependency with the accessed portion of content; and

insert the cache entry into cache such that the validity of the cache entry is dependent on the customized dependency.

27. A computer program product for use in a server computer system that provides Web pages to requesting client computer systems, the Web pages potentially including content from locations that are external to the server computer system, the server computer system including a cache that stores portions of cached content previously received from locations external the server computer system, the computer program product for implanting a method for purging a cache entry, the computer program product comprising one or more computer-readable media having stored thereon computer executable instructions that, when executed by a processor, cause the server computer system to perform the following:

monitor one or more custom dependency conditions associated with an instance of a customized cache dependency;

determine if the one or more custom dependency conditions have been be satisfied;

receive an indication that the one or more custom dependency conditions have been satisfied; and

purge a cache entry at the server computer system in response to receiving the indication.

28. A Web page server comprising:
- a processor; and
 - one or more computer readable media, having stored thereon:
 - a cache; and
 - a framework wherein the framework comprises:
 - an extensible cache dependency base class for deriving custom dependency classes wherein the custom dependency classes are adapted to define at least one event the occurrence of which will cause a cache entry contained in the cached to be purged.